

RESPONSE TO COMMENTS - SEPTEMBER, 2006

REISSUANCE OF NPDES PERMIT NO. NH0021423

BETHLEHEM POWER PLANT
BETHLEHEM, NEW HAMPSHIRE

INTRODUCTION

In accordance with the provisions of 40 C.F.R. §124.17, this document presents U.S. Environmental Protection Agency's (EPA's) responses to comments (RTC) received on the draft National Pollutant Discharge Elimination System (NPDES) Permit (NH 0021423). The RTC explains and supports EPA's determinations that form the basis of the final Permit. The Bethlehem Power Plant (BPP) draft permit public comment period began on August 9, 2006 and ended on September 7, 2006. Comments were received from:

1. Mark Driscoll, Plant Manager, Bethlehem Power Station; and
2. Jeff Andrews, Sanitary Engineer, New Hampshire Department of Environmental Services (NHDES).

The final Permit has changed from the Draft Permit based on comments received. EPA's decision-making process has benefited from the various comments and the additional information submitted. The information and arguments did not result in any substantial new changes to the permit. However, one change listed below is detailed in this document and reflected in the final Permit. The analysis underlying this change is explained in the response to comment number 2.

1. In Part I.A.4, the "Iron" requirement has been changed to "Total Recoverable Iron" for clarification.

RESPONSE TO COMMENTS ON THE DRAFT NPDES PERMIT

COMMENT NO. 1: from Bethlehem Power Plant (BPP) - by letter dated August 31, 2006

Changes needed to the Fact Sheet:

"Page 5 of 17, last paragraph should read – water pumps directly into the circulating water line going to the tower, not directly into the drain & tempering tank.

Page 6 of 17, first paragraph should read - solids are mixed in with bottom ash and removed for off site use.

Page 6 of 17, third paragraph should read - drain/tempering tank has three 150 gpm pumps not 50 gpm.

Pages 6 of 17, plugs are used to clean the condenser tubes. The solids are collected into the floor drains along with the rinse water which goes to the drain/tempering tank which goes to the recirculation cooling system."

RESPONSE NO. 1:

EPA does not alter or reissue Fact Sheet's after public notice. The previous factual corrections and changes to the Fact Sheet are acknowledged by EPA. In consideration of these corrections, EPA has determined that no changes are warranted in the final permit. Although the facility may be capable of discharging greater than 150 gpm to the river (three 150 gpm pumps instead of three 50 gpm pumps), the permit specifically requires (Part I.A.3.a) that "At no time shall the discharge flow rate exceed 150 gallons per minute." Therefore, only one pump at a time can be used by Bethlehem Power for discharging.

COMMENT NO. 2: from Bethlehem Power Plant (BPP) - by letter dated August 31, 2006

“Permit:

Page 4 shows the new proposed limits: Oil & grease we see no change, total suspended solids 100 mg/l old permit there was no limit only report. PH was changed from 6.5-8.5 to 6.5 to 8.0. New test for Iron. PH for rainfall.

Our comments on these new proposed limits.

We have seen TDS as high as 220 mg/l on several test results over the past 20 years. We propose to leave the TDS as report, or have it read less than 220 mg/l. Please indicate what iron test method you would like us to use and also how you would like us to gather the rain fall for PH testing. Will a rain gauge be adequate?"

RESPONSE NO. 2:

EPA assumes the commenter meant total suspended solids (TSS) and not total dissolved solids (TDS) because the permit requires TSS, not TDS and there is existing data for TSS which shows values as high as 220 mg/l. As indicated in the Fact Sheet the TSS limit is based on the 2006 draft Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activities (MSGP)¹. This limit is based on stormwater data from many industrial sectors which indicates that this limit can consistently be met with and without the use of best management practices.² Therefore, no change has been made to the TSS limit in the final permit.

The requirement to monitor iron in the draft Permit is also based on the 2006 draft MSGP. The final Permit now clarifies that the limit is for *Total Recoverable Iron* as opposed to simply *Iron* as in the draft Permit. In addition, acceptable test methods for total recoverable iron can be found in 40 C.F.R. Part 136. Part I.A.2 of the draft and final Permit reads, "All procedures used for the purpose of collecting, preserving, and analyzing wastewater samples shall be in conformance with 40 C.F.R. Part 136 unless alternative procedures are specified in this NPDES permit."

A rain gauge is one of many adequate and acceptable containers that can be used to collect rain water for pH analysis. In this regard, no change has been made to the final Permit.

¹ Federal Register, Vol. 70, No. 230, December, 1, 2005, p. 72116 - 72120. See Sector O - Steam Electric Power Generating category. The comment period for the proposed MSGP closed on 2/16/06 and EPA expects the permit to be final by the end of this calendar year.

² The value chosen was the median number of all the TSS values from the National Urban Runoff Program study done between 1977 and 1983.

COMMENT NO. 3: *from Jeff Andrews (NHDES) - by email dated August 15, 2006*

In Attachment D of the Fact Sheet, “[t]he dilution factor equation should have been changed to delete the second term in the numerator [i.e. $(Q_{pdf} \times 1.547)$] so that it is the equation for when the river is the water supply and the result is as shown on page 8 of 17 of the fact sheet (i.e. 93.5).”

RESPONSE NO. 3:

This is correct and EPA inadvertently included an older copy of Attachment D with the Fact Sheet that was sent out for public comment. As noted in the comment, however, the correct value was used in the calculation of the dilution factor which was then used to determine permit limits. Therefore, no change in the final Permit is necessary.